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ABSTRACT

One method of determining teachers' beliefs about teaching is through investigation of their personal teaching metaphors. Delaware health and physical education teachers (N=391) were surveyed with 104 responding (26.6 percent) to "A teacher is like...". Additionally, two factors were also explored: grade level taught and accumulated teaching experience. Seven metaphor categories emerged with parent/protector and group leader predominating (totaling 69 percent of responses). Results indicated that parent/protector was predominant in elementary and middle school and for teachers with 1-25 years of experience; group leader was dominant in high school and college and for teachers with over 25 years experience. It is concluded that an understanding of one's personal metaphor for teaching would assist in reflection about one's practice, which would provide potential for more effective teaching. (Contains 38 references.) (ND)

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Running head: METAPHORS FOR TEACHING

Metaphors for Teaching: How Health and Physical Education Teachers Describe Their Roles

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Abstract

One method of determining teachers' beliefs about teaching is through their personal teaching metaphors. The purpose of this study was to examine health and physical education teachers' metaphors. Additionally, two factors were also explored: grade level taught and accumulated teaching experience. Three hundred and ninety one Delaware teachers were surveyed with 26.6 % responding to "A teacher is like...". Seven metaphor categories emerged with parent/protector and group leader predominating (totaling 69% of the responses). Results indicated parent/protector was predominant in elementary and middle school and for teachers with 1-25 years experience; group leader was dominant in high school and college and for teachers with over 25 years experience. It was felt that having an understanding of one's personal metaphor for teaching would assist in the reflection about one's practice which would provide potential for a more effective practice.

Metaphors for Teaching: How Health and Physical Education Teachers Describe Their Roles

Reflective teaching has become a buzzword in education (Hellison, 1993). There are probably as many ways to reflect on one's practice as there are teachers. One such method of reflection is a teacher's metaphor for their conceptions of their professional identity. According to Bullough (1991) there is a growing interest in the study of metaphors that teachers use to reveal their self-understandings (p. 43). However, little has been reported about teachers' metaphors in health and physical education. Therefore, an important question facing the profession is how health and physical educators view their roles as teachers. This question is important for two reasons. First, it is important to conduct research on teacher cognitions since it has the potential to increase our understanding of how experience shapes a teacher's practice. Secondly, having an understanding of one's personal metaphor for teaching would assist in the reflection about one's practice.

Munby (1986) states:

> ...it is significant to understand how teachers see their worlds. And, because imagery is often present in the language we use, it becomes important to decode the images if we are to come to terms with the substantive problems that teachers believe themselves to face. (p. 197)

There is a continuing growth in the body of research on teacher thinking, teacher planning, and teacher decision making which has been based on a cognitive information-processing model (c.f. Borko, Livingston, & Shavelson, 1990; Isenberg, 1990; Hewson & Kerby, 1993). It can be postulated that through the use of conventional data collection techniques such as stimulated recall, Kelly Repertory Grid, and participant-observation, problems with the clarity of the data may result.

Several assertions exist which preclude the use of the aforementioned techniques if the researcher is precisely interested in capturing teachers' thinking. These assertions are based on the work of Munby (1986) who observes that through such data collection means it is assumed that the interviewer and the teacher are sharing their language unproblematically. An important principle is that in reality both teacher and researcher are interpreting the events based on their own reference points. In addition, these aforementioned techniques may not capture the teacher's conceptualization of a problem. Therefore, in order to counter the problems with traditional data collection techniques Munby (1986) believes that metaphors can be used by researchers to discover "something about teachers' beliefs or knowledge from the perspective of the teachers themselves" (p. 198).

Definition of Metaphors. Teaching can be poetic and meaningful through metaphor. Lakoff and Johnson (1980) define the term "metaphor" as "understanding and experiencing one kind of thing in terms of another" (Lakoff & Johnson, 1980, p. 5). They indicate that on a daily basis we live by metaphoric representations of the world. "Metaphor is pervasive in everyday life, not just in language but in thought and action" (Lakoff & Johnson, 1980, p. 3). In fact, Lakoff and Johnson (1980) believe that metaphor is the usual way common concepts are represented. For example, by drawing on the "language as conduit" metaphor they indicate that we abide by a tacit understanding in which "ideas are objects, linguistic expressions are containers, and communication is sending" (Lakoff & Johnson, 1980, p. 10). In a study of two teachers conducted by Munby (1987) the "language as conduit" metaphor is revealed in expressions like "break down the information", "throwing in a fact", and "I'll give him a serious answer".

At the foundation of teacher thinking research is what teachers believe their jobs to be and how that belief influences their approach to teaching. Researchers have indicated that teachers and students hold a particular view of the teaching and learning process which influences what occurs in the classroom (cf. Clark & Peterson, 1986; Solas, 1992; Wittrock, 1986). Fenstermacher and

Soltis (1986) state that "...a teacher's approach, his or her general conception of the teacher's role, plays an important part in how one teaches" (p. 3). It is their belief that teachers have a particular view toward teaching that guides them in their work. That viewpoint toward teaching determines the teacher's tone, teaching style, and classroom management techniques. In addition, the teacher's viewpoint determines what he or she believes an educated person to be and structures how students are assisted in attaining that ideal.

Lakoff and Johnson (1980) support Fenstermacher and Soltis (1986). They believe an individual's conceptual system is metaphorical in nature. This conceptual system plays an important role in what we perceive, how we relate to people, and how we function in the world. According to Lakoff and Johnson (1980), people talk and act according to the way in which they conceive things. The personal metaphor through which one represents teaching is an image which contains the beliefs and overarching theories one holds to be true about teaching. As an individual grows, learns, and reflects, that metaphor can change to reflect changes in beliefs. This premise is further illustrated by Kloss (1987) who believes that the way teachers conceptualize their roles is interrelated with how they conceptualize their institution and their students. This conceptualization controls the learning process. Provenzo, McCloskey, Kottkamp, and Cohn (1989) believe that because teachers work in an ambiguous context in schools they need a language which "enables them to clarify meaning in the midst of complexity" (p. 551). The teacher's personal metaphor enables each teacher to express more fully what he or she does in his/her work.

The use of metaphors in education can be considered from two perspectives. From a macro level, metaphors for the educational process itself can be inspected. These metaphors represent the curriculum, the school, the teachers, and the students as an entire system. Examples of these metaphors include the factory (Bullough, 1994; Pineau, 1994; Tyack & Hansot, 1982), the laboratory (Kloss, 1987), and the mental hospital (Kloss, 1987). On a micro level, metaphors describe how teachers view their roles in the educational system.

Metaphors for Teachers' Roles. While metaphors exist for schools and teachers which

reflect an industrial or related metaphor, it is not necessary that these influence the personal metaphor of teachers. Provenzo, et al (1989) believe that metaphors used by teachers provide the means for interpreting what it means to be a teacher in today's American society.

According to Grant (1992), at the root of the individual teacher's practice is a knowledge base framed by a metaphorical conception of teaching and bound by the context of the subject matter he/she is teaching and by the ways in which that conceptualization of subject matter is translated into work tasks for students. In keeping with this opinion Thornbury (1991) wrote:

> To teachers in their classrooms, then, it is the image of teaching that has potency, not the theory of teaching: theories are only as persuasive as the images they evoke, and only that which is intuitively attractive (i.e. consistent with one's image) is given much credence in the methodological market-place. (p. 196)

Because an individual's creation of a metaphor is a unique devise fashioned in order to find meaning in their life, the variety of metaphors for teaching is as vast as the number of teachers presently teaching in the nation's schools. However, educators have reflected on metaphors which might describe individuals' approaches to teaching. For example, Tworek (1994) offers the metaphor of teaching as fishing. Like teaching, fishing has objectives: will the fish be kept or released?; what skills will be practiced? There are also many decisions to be made: the kind of rod, bait, and boat to use, as well as when to leave the dock. While there are some variables out of the fisherman's and teacher's control methods abound which guarantee a higher success rate. Modifications of methods can be made when the water gets choppy so that headway can continue.

Fenstermacher and Soltis (1986) present three specific approaches to teaching: executive, therapist, and liberationist. An executive "views the teacher as an executor, a person charged with bringing about certain learnings, using the best skills and techniques available" (p. 4). The therapist views the teacher as "an empathetic person charged with helping individuals grow personally and reach a high level of self-actualization, understanding, and acceptance" (p. 4). Finally, the liberationist views the teacher as "a liberator, a freer of the individual's mind and a

developer of well-rounded, autonomous, rational, and moral human beings" (p. 4). Thus, Tworek (1994) and Fenstermacher and Soltis (1986) provide very different examples for the many possibilities which exist for teachers to represent their role in education.

Research which examined teachers' thinking about their role in schools was an attempt to explicate their metaphors for teaching while describing their practice. Munby (1986) examined five experienced junior high school teachers' metaphors for teaching based on stimulated recall interviews and repertory grid interviews. He employed computer analysis to identify metaphors in the interview transcripts. He reported on one teacher, Alice. Munby's interpretation of the data suggested the metaphor "lesson as moving object". Throughout Alice's speech were fragments which suggested movement such as "Keep it somehow moving smoothly", "We were slow at getting started today", "It went real well", and "When I keep it going" (p. 203). Everything about the class and the lesson appeared to be in motion, i.e., the teacher, the students, and the subject matter. This metaphor appeared to be her construction of reality. In a similar study, Munby (1987) again found the "lesson as moving object" metaphor from a teacher but it was coupled with another metaphor, learning as a conduit for communication. This particular metaphor depicts information as a commodity and communication of information works by transferring the commodity from one person to another. In this metaphor the mind functions as a container to be filled. That is, the teacher has the necessary information and he/she fills the mind of the student. One conclusion drawn was that the language used by the teachers represented how they viewed their professional worlds. A second conclusion was that the teachers may be following a "folk tradition of ways to speak about the events of school" (Munby, 1987, p. 397).

Provenzo, et al.(1989) also employed the interview technique to investigate perceptions and attitudes of teachers toward their work. While the subjects were never directly asked to define teacher, metaphors in their speech revealed what it meant to be a teacher. Classical images appeared such as their metaphors of teacher as nurturer of things that grow; an anchor for children; or a trainer. Some teachers explained their roles in terms of other professions: "Half the time I think I am a preacher" (Provenzo, et al., 1989,p. 553). For some teachers one descriptor for their

classroom reality was too difficult and they described their work using an all inclusive catalogue of traditional metaphors. In some cases non-traditional metaphors, such as "being cut from a special kind of cloth", emerged and indicated to the researchers that these teachers brought unique qualities to their work. One further use of metaphorical speech indicated teachers' experienced a loss of prestige, authority, and power once held by the mere fact of being a teacher.

Grant (1992) examined the relationship of metaphors in the knowledge base of three experienced secondary teachers to their classroom actions. "Magicland" represented physics, "game" represented history, and "journey" represented literature. Grant (1992) found that the teachers' images were initially drawn from personal beliefs which drew them to a particular subject area. That image coupled with those beliefs shaped how they presented classroom material. For example, the physics teacher used the mysteries found in physical principles as entertainment. However, he also used conventional written and discussion tasks that required problem solving and interpretation of data. This teacher believed that most students find high school boring. Therefore, he was determined to make learning interesting. To this end he developed a rapport with the students which conveyed a magical sense of community. He also sponsored a special classroom event which was designed to re-motivate second-semester seniors for the end of the school year.

According to Munby (1987), through the use of metaphors it is possible to take a different approach to the study of teacher thinking, offering a view of how teachers' perceive their world and how they construct reality. Given the growing body of work in this area with regard to pre-service teachers, the lack of research using experienced teachers, and the importance of metaphors in education, the purpose of this investigation was to understand how health and physical education teachers view their roles as teachers based on their metaphors describing their teaching. Three sub-questions were also posed:

1. Is there a difference in how the teaching role is viewed based on the grade level at which the subject taught?

2. Is there a difference in how the teaching role is viewed based on the subject's total number of years of teaching experience?

3. How much agreement do the Delaware teachers have with the literature?

It should be emphasized that the purpose was not to generalize metaphors for all teachers. Metaphors are unique for each individual and evolve from that individual's unique experiences.

Method

Subjects. The subjects for this study were the 391 health and physical education teachers in the state of Delaware based on the current mailing list for the Delaware Association for Health, Physical Education, Recreation, and Dance. This listing contained both members and non-members of the association; of those individuals 192 were male and 199 were female.

The state of Delaware is divided into three counties. 254 subjects were from New Castle County, the northern most county in the state. This county is the most densely populated and is predominantly urban and industrial. 84 subjects were from Kent county, the middle county in the state. This county is the site of the state capital and is predominantly suburban. Finally, 52 subjects were from Sussex county, the southern most county, which is predominantly rural. One subject on the list taught in the state of Pennsylvania. Subjects represented elementary through high school health, physical education, adapted physical education, driver education, and dance education in both the public and private sectors. Of that group 96 subjects taught at the elementary level, 87 subjects taught at the middle school level, and 125 subjects taught at the high school level. 47 subjects taught at religious affiliated, private, or special schools, such as the State Autistic Program. One member of the list was an administrator with a New Castle County school district. 43 health, physical education, and recreation professionals in higher education were also included. In some instances subjects taught more than one level of physical education, usually combining responsibilities at the elementary and middle school levels; these subjects were labeled as teaching at mixed levels.

Data Collection. This study is a quasi-qualitative study in that the data were collected in a non-traditional manner and there was no triangulation with other data. Unlike data collection techniques previously described in the literature for examining teachers' metaphors, data were collected by means of a questionnaire mailed to each of the teachers. The goal of this questionnaire was to make the data collection more of a short, guided conversation in written form rather than a traditional survey. Much like the constructivist approach to human behavior, the emphasis of the data was on the importance of meaning in each teacher's life. Therefore, the questionnaire consisted of three open-ended questions: (a) I think a teacher is like a _____, (b) Briefly explain why you feel this way, and (c) Has this symbol (metaphor) changed over the years? To aid the subjects in responding to the questions, the cover letter which accompanied the questionnaire provided a definition for metaphors as follows: Since meaning is conveyed in language through words, one way to describe that role (in the classroom) is to find a word or symbol which captures the essence of what we believe our job really is.

Each questionnaire was coded with a number corresponding to the subject's position on the mailing list in order to identify subjects for a second mailing should the initial response be insufficient. This code also allowed the researcher to collect additional data such as respondents' gender and percentages of responses from each of the three counties in the state. The codes were removed before the questionnaires were examined. Additional questions solicited years of teaching experience, level presently teaching, and content area teaching (health, physical education, both health and physical education, or dance).

Data Analysis. Rubin (1981) believes that "questions seeking to understand the meanings people attribute to the events in their lives or the process through which those meanings come to be internalized are not amenable to quantification" (p. 98). Therefore, because the data were viewed as descriptive in nature with the intent of understanding the teachers' views of their roles the metaphors were examined inductively based on the analytic induction technique detailed by Bogdan and Biklen (1992). The responses were searched for patterns, similarities, and common themes which then became coding categories. More specifically, each metaphor was analyzed for its

characteristics and then matched with other metaphors which held the same characteristics. In this way the individual metaphors, especially ones which were not straightforward (e.g. hardware store, guy in white hat, conductor) could be organized into smaller groups with similar characteristics much as in concept formation. These smaller groups were then given a label which collectively captured the essence of each of the member metaphors. The categorization of the metaphors was a product of the researcher's interpretation of each teacher's metaphor and subsequent description. The metaphors were a self representation for each teacher. The purpose of the demographic data was to establish parameters for answering the research questions.

Results

A total of 391 questionnaires were disseminated. Of that number, 104 were returned on the first mailing, realizing a 26.6% return rate. While this was a small response rate a second mailing could not be done due to the close of the academic year. All mailing addresses were to the subjects' school. Although gender was not considered in the analysis it was interesting to note that 62 of the respondents were female while only 42 were male.

Seven categories resulted from an examination of the metaphors. Two of those seven categories dominated the results, with a combined response rate of 69%. The dominant metaphor category was labeled as parent or protector (44%). This category represented the teacher as someone who nurtures, supports, and protects. This result was similar to the classical metaphors found by Provenzo, et al. (1989). Metaphors in this category at times implied the need to set limits as a parent might or to act as a confidant similar to that of a counselor. Major responses in this category included "role model", "friend", "parent", "mentor", and "gardner". Subjects were asked to briefly explain why they felt the way they did about their metaphor. One elementary/middle school teacher explained "teacher as nurturer" as follows:

> I think you provide students with the raw material and then you try to have each student develop with your guidance at their own rates. A teacher needs to encourage the

growth but it is up to the student to decide the rate.

Other interesting metaphors in this category included "mother bird", "provider of love", "tree trunk", and "the guy in the white hat". An elementary school teacher described her "teacher as mother bird" metaphor as: "Children are under your wing as they grow. Teachers, like mother birds, develop the students' confidence and self-assurance which is needed for adult life".

Metaphors in the second dominant category focused on the teacher as group leader(25%)- someone who guides, steers, directs, and coaches. Predominant metaphors in this category included "coach", "guide", "facilitator", and "motivator". An elementary school teacher described the metaphor of "teacher as guide" in this manner:

> We as teachers are always pointing students in the right direction or redirecting them when they make a "wrong turn". We explain what they encounter along the way and explain possible "routes" to take in the future. This also involves "entertaining" as we go, also, to keep attention.

Also included in this category were metaphors which contained richer imagery and what might be construed as more depth such as "captain on the sea", "director", and "conductor". One secondary school teacher who shared the "captain on the sea" metaphor explained it as follows:

> Tides go in and out. New students come in each year and leave each year. Some things stay constant; yet new shores are always forming. The captain knows the depth of knowledge and its value. He tries to get the students to take advantage of things around them. A captain guides through the dangerous waters to find the calm places.

The third category was labeled change agents (13%) and focused on the teacher as the agent for change or one who provided the tools for change. Examples from this category included "catalyst", "empowerer", and "educator". One college professor explained this category as follows:

> We cannot demand/command how, what and when students learn; but, we can guide them, motivate them, question them, praise them, and expose them to appropriate

opportunities for learning. Once "turned on", they learn in spite of us!

The fourth category, job dissatisfaction (13%) focused on what appeared to be negative aspects of teaching (e.g., "babysitter", "disciplinarian", "target", and "scapegoat"). In these cases the teachers appeared to be disgusted with the ethos of the work place. Again, Provenzo, et al. (1989) found similar metaphors in their study. One example from this category in the present study is drawn from an elementary school teacher:

> I feel this way because year after year the duties have increased and the "importance" of the p.e. curriculum has lessened in the eyes of the administrators. "How many ways can the P.E. teacher be used outside of the teaching field?" seems to be the cry of administrators. A teacher was respected by students, parents, and community when I started. Today garbage collectors get as much respect as most teachers.

Six percent of the responses were included in a category labeled sources for learning/inspiration. In this category were placed those metaphors which established the teacher in a very special role, one that was much more dramatic than a parent or protector role, especially in the imagery that was evoked by the metaphor. These metaphors are also similar to the non-traditional metaphors found by Provenzo, et al. (1989) which expressed the unique qualities of the teacher. Examples from this category include "seed to future", "source of light", "shining light", and "gift". A middle school teacher explained the "source of light" metaphor as follows:

> I believe a teacher is a source of light if students are open to facing the light and chose to use it to light their way. We can light the lamp of knowledge, fuel ideas, and even burn-out sometimes.

The sixth category, also paralleling Provenzo et al. (1989), contained metaphors which carried performer (4%) characteristics (e.g., "performer", "entertainer", "salesman", and "actor"). This category also appeared to hold negative connotations for those using it. However, unlike the job dissatisfaction category, there appeared to be a less cynical and less disgusted tone in this category. For example, one secondary school teacher explained:

> Students today need a great deal of visual stimulation. The teacher must be energetic and able to capture the audience's attention. Once the teacher captures them, he/she must maintain their attention and bring the show home.

Another secondary school teacher who also chose "teacher as performer" explained: "Always must act in front of class and teach similar content in a variety of innovative ways".

The last category, construction, identified by 2% of the respondents, indicated some form of creation using different types of materials (e.g.,"molder", "builder", and "character former"). The "teacher as builder" metaphor was explained by one secondary school teacher as follows: "You start building a strong foundation and expand and add to this until you get a finished product".

As in the study by Provenzo, et al. (1989) some teachers could not describe their work by an all encompassing metaphor. These teachers provided a string of "jack of all trades" metaphors. In coding these responses the dominant category was used for analysis.

Table 1 presents the metaphor distribution in each of the seven categories based on the teachers' employment level. The figures represent the number of teachers who responded to each category. An examination of this data reveals that the dominant category for elementary through secondary levels is the parent/protector metaphor. This phenomenon is particularly strong in the elementary, middle, and mixed levels of teaching. A shift toward a heavier emphasis on "teacher as group leader" appears at the secondary level. This trend suggests a developmental attitude by the teachers toward the students at a particular level. That is, it appears that these teachers view students in elementary and middle school as needing more nurturing whereas teachers in secondary school and college value a mentoring relationship as well as a sense of growing independence.

Table 2 displays metaphors for teaching based on number of years of teaching experience. As in Table 1, the figures represent the number of teachers who responded to each category. Much as in the analysis based on teaching level, the prevailing metaphor is "teacher as parent/protector". However, for those teachers with 26-40 years of teaching experience this trend shifted to an emphasis on "teacher as group leader". This might be attributed to the fact that 67% of the

respondents in this group came from the secondary and college levels.

In regard to the question "Has this symbol (metaphor) changed over the years?" the responses were 52 that change had occurred and 48 that change had not occurred. There were three subjects who did not respond to this question. In an examination of each grade level taught the responses were 50 per cent that their metaphor had changed and 50 percent that their metaphor had not changed. The trend was also toward a 50 percent response rate for metaphors that had change or had not changed when the number of years of teaching experience were examined. However, two differences did occur in that trend. One was the 16-20 years of experience group whose distribution was four for change and ten against change. The other group was the 21-25 years of experience group with ten for change and five against change. One of the weaknesses of this particular question was that it did not follow up with asking the teachers why their metaphor did or did not change. Therefore, it is difficult to speculate why these two groups were so different from the others. However, some teachers did provide that information without being asked. Several teachers recognized that a change in grade level at which they were teaching changed their metaphor. Another teacher responded that "Teaching seems to have moved from gardner to disciplinarian". One elementary school teacher whose metaphor had changed responded by writing, "Before, an educator simply meant teaching in the academic components of education. Now educators must teach all facets of life, some more than others, but all facets none-the-less". This subject's metaphor was in the category "change agent". One subject at the college level who stated there was no change in his/her metaphor wrote, "I wouldn't have used the same words 25 years ago, but I would have had the same basic belief". This subject's metaphor was also in the category "change agent".

Discussion

As stated previously, the purpose of the study was not to generalize metaphors for all teachers. Through the construct of metaphor, this study provided a vehicle for understanding the way in which some health and physical education teachers view their roles and interesting trends which emerged. What the metaphors describe about these teachers is that they make sense for themselves out of the experiences and roles in which they find themselves. The teachers in this study most closely resembled the teachers in the work of Provenzo, et al. (1989) in the kinds of metaphors generated. Six of the seven categories in this study paralleled metaphors found in the Provenzo, et al. (1989) study. In addition, several of the metaphors which appeared in the results of this study are also mentioned in theoretical pieces by Kloss (1987) and Tworek (1994). The predominant metaphors were either "parent or protector" or "group leader". It is not surprising that the majority of respondents viewed their role as nurturing or leadership since, as Provenzo, et al.(1989) state "teaching demands a type of personality that has the determination to focus on the needs of the children in a particular classroom" (p. 556). The other categories which emerged: change agents, sources for learning/inspiration, performer, and construction, may collectively represent a category of untraditional metaphors. These metaphors may represent personality traits of the individual teachers. These personality traits are not gained through education but, nevertheless, enhance the teaching act. Finally, one category represented "teacher dissatisfaction". Provenzo, et al. (1989) explained that teachers' enthusiasm for teaching may be reduced by perceptions of problems within the field of education. The teachers in this study seemed to feel a loss of power, prestige, and authority.

The constructivist perspective on knowledge may be one filter through which these teachers' metaphors may be examined. Gurney (1995) stated the following about constructivism:

> A constructivist views "reality" as that which passes through the filter of human senses to be actively constructed through an interactive network of associations, language, symbols and tacit memories of prior experience. Knowledge is thus regarded as

personal, dynamic, and necessarily context-bound. (p. 569)

Based on this view teachers' classroom realities would be influenced by their memories of being a student, by the particular philosophy of their teacher education program, as well as by the school context in which they work. A study by Nespor (1987) found that teachers had critical episodes or experiences early in their teaching careers which were important to their present practice. Teachers also have certain beliefs about what is relevant with respect to their students, their teaching, learning, the curriculum, and the context in which these exist (Oberg,1988) . Teacher beliefs may be largely unarticulated and may be considered a teacher's tacit knowledge (Isenberg, 1990). Because all of these elements are an interconnected network it may be difficult to determine precisely what determines a teacher's representative symbol for their work. However, in this study the categories of parent/protector and group leader dominated the results with grade level taught being the predominant influencing factor. The distribution of the metaphors implies that the teachers viewed their role as a parental or protective one with elementary and middle school students while secondary and college teachers appeared to view their role as a mentoring relationship. The literature does not address this question, however, it would appear natural for teachers to take a parental role with young children who need close attention during important developmental years. It would also appear to be logical that older, more mature students need a different kind of relationship with their teacher since they are more closely preparing to take an active role in our society. Considering the results of this study, it may be hypothesized that commonalties exist in teachers' representations of their classroom realities. A further area for examination would be the influences on elementary school teachers to have a parent/protector metaphor and on secondary school teachers to have a group leader metaphor.

In conjunction with the notion of a teacher's reality being influenced by the grade level taught is the teacher's amount of teaching experience. Russell, Munby, Spafford, & Johnston (1988) state that "the metaphors some teachers employ in discussing their views of teaching and learning are indicative of their level of experience and professional knowledge" (p.87). While this view may be true it was not a significant trend in this study. In the present study it would appear

that the grade level taught was more influential in defining a teacher's metaphor than the level of experience. For example, there was a trend in this study for teachers with one to five years of service to have a metaphor of "teacher as parent/protector". This was also true for teachers with 21 to 25 years of service.

What, then, can teachers do with their personal teaching metaphors? Schön (1983, 1987) indicates that metaphors can provide a perspective or frame, a way of looking at things, in order to gain new perspectives on one's reality. Metaphors are an extraordinarily powerful tool for teachers to use in examining and expressing their knowledge and beliefs and as a perspective for problem solving. With one simple word or phrase the teachers in this study captured the essence of the frame they use to view their role as teachers. This is the beginning of making their beliefs explicit. This is important since, as Knowles (1979) suggests, teachers will not know why they are doing what they are doing if their beliefs are not made explicit. Grant (1992) views a teacher's metaphor as developing out of a complex relationship with the components in their social world as well as with the components in their professional world. This may be an important relationship to examine, particularly for those teachers whose metaphors were categorized as job dissatisfaction. Beyond mere expression, the metaphor provides an avenue for the teacher to understand his/her classroom behavior. Sperling (1994) suggests that, as an exercise, teachers should examine their understanding of instruction, curriculum, evaluation, and even the arrangement of their classroom through the lens of their teaching metaphor. An appropriate follow-up study to the one reported here would be an examination of teachers in each of the metaphor categories developed in this study in light of Sperling's (1994) suggestion. In doing such a study qualitative methods, such as indepth interviews, as well as quantitative statistics, such as chi square, would provide a more complete understanding of teachers' views of their roles. Further understanding of the metaphor and how it is related to teachers' knowledge and beliefs and how it affects their classroom practice is necessary in order to present a more complete representation of those views.

Since reflection is part of understanding one's teaching metaphor, in-service education

programs can be designed to promote reflection and to assist teachers in the reflective process (Tsangaridou & Siedentop, 1995). Elicitation of one's teaching metaphor promotes an awareness of one's attitudes and belief systems which is carried into the work context. For example, pedagogical strategies could be used to stimulate teachers' discussions about their assumptions and how those assumptions affect their teaching. The teachers could then strategize possible alternatives to specific educational issues (Gore, 1990). A novice teacher's personal teaching metaphor could also be used in a mentoring situation as a reference for reflection as they are inducted into the teaching profession. Furthermore, Osterman (1990) illustrated the growth of such in-service practices by writing:

> During the last few years, there has been a growing interest in reflective practice as a means of professional development. In the field of education, teacher and administrators have seen a rapid growth in the number of preservice and inservice programs that incorporate the reflective practice-programs which use experience and reflection to develop professional skills (pp. 133-134).

The educational possibility created by this and similar research, then, can also influence the way pre-service teachers are prepared. Since a teacher's beliefs influence his/her behaviors in the classroom it is important for teacher educators to be able to redirect ineffective teaching behaviors. Wubbels (1992) recommended using metaphors as one strategy for changing pre-service teachers' cognitions and behavior. A number of researchers have investigated the metaphors for various aspects of teaching held by pre-service teachers in the attempt to understand how these future teachers view their practice (cf. Bullough, 1991; Johnston, 1992; Morine-Dershimer & Reeve, 1994; Weinstein, Woolfolk, Dittmeier & Shanker, 1994). This is a logical step in order to incorporate what is learned from experienced teachers into teacher preparation courses. This knowledge is important and should be incorporated into teacher preparation courses. Provenzo, et al. (1989) believe that:

> Teacher metaphors, systematically understood, can become a basis for dialogue

> between teachers, corporately, and the educational system, as well as between the reality of teacher experience and teacher education programs. (p. 571)

Reflection-in-action (Schön, 1983) is a practice in which neophyte professionals and pre-professionals should be instructed. If the practitioner is taught to think and reflect-in-action, there is potential for having a more effective practice. This is summarized most suitably by Hellison and Templin (1991) when they asserted:

> Teaching is a complex, personal process, and physical education subject matter offers little guidance about how to teach it best. Despite the subjectivity of the process, there is no substitute for learning to reflect upon one's teaching-upon the larger social and ethical issues, upon one's beliefs and values, upon the act of teaching itself. (p. 9)

In sum, metaphors shape the way teachers view their professional roles. They are the underpinnings for processing information related to teachers' subject matter. In conjunction with specific content and pedagogical knowledges teachers' continually assess their roles by drawing on data from both societal and professional worlds. The longer a teacher remains in the profession the more societal changes as well as professional changes and pressures may influence their view of their roles. After reflecting on all the data, teachers then make changes which result in improving instruction.

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Table 1

Distribution of Metaphors by Grade Level Taught

		Metaphor Categories						
Grade Level		1	2	3	4	5	6	7
Elementary	(N=30)	15	6	2	3	2	1	1
Middle	(N=20)	7	1	-	4	4	2	2
Mixed	(N=12)	8	2	1	1	-	-	-
Secondary	(N=25)	9	6	1	3	2	2	2
College	(N=17)	5	9	3	-	-	-	-

Note. Category 1 = Parent/Protector; Category 2 = Group Leader; Category 3 = Change Agent; Category 4 = Job Dissatisfaction; Category 5 = Source for Learning/Inspiration; Category 6 = Performer; and Category 7 = Construction

Table 2

Distribution of Metaphors by Teaching Experience

	Metaphor Categories						
Years of Experience	1	2	3	4	5	6	7
1-5 (N=16)	9	3	2	1	1	-	-
6-10 (N=15)	6	3	2	2	1	1	-
11-15 (N=23)	9	5	-	3	4	1	1
16-20 (N=15)	5	4	1	1	2	1	1
21-25 (N=17)	10	2	1	3	-	-	1
26-30 (N=14)	5	7	2	-	-	-	-
31-35 (N=3)	-	1	-	1	-	-	1
36-40 (N=1)	-	-	1	-	-	-	-

Note. Category 1 = Parent/Protector; Category 2 = Group Leader; Category 3 = Change Agent; Category 4 = Job Dissatisfaction; Category 5 = Source for Learning/Inspiration; Category 6 = Performer; and Category 7 = Construction